# COST EFFICIENCY STANDARDS IMPLEMENTATION PLAN

# **BACKGROUND**

- 1. Cost efficiency standards will be established for each of the following performance indicators:
  - A. The ratio of passengers, as expressed in unlinked trips, to service area population.
  - B. The ratio of operating expenses to passengers, as expressed in unlinked trips.
  - C. The ratio of operating expenses to revenue hours.
  - D. The ratio of revenues to operating expenses.
  - E. The ratio of passengers, as expressed in unlinked trips, to revenue hours.
  - F. The ratio of revenue hours to service area population.
- **2.** For purposes of establishing cost efficiency standards, transit systems are divided into the following peer groups:
  - 1. Milwaukee
  - 2. Madison
  - 3. Medium Bus Systems
  - 4. Small Bus Systems
  - 5. Commuter Bus Systems
  - 6. Shared-Ride Taxi Systems

## STEP 1

Prepare tables for each of the performance indicators for each of the peer groups.

For the Milwaukee, Madison, and the Medium Bus Systems, peer groups of similar sized transit systems with similar operating characteristics external to the state will be developed to establish the cost efficiency standards. For each of these groups, the transit systems used to establish the peer group will be those used in the most recent management performance audit. Data used for these transit systems will be the most recent available from the National Transit Database.

For Small Bus, Commuter Bus, and Shared-Ride Taxi systems, standards shall be established using data from only in-state systems. Data used shall be from the preceding calendar year.

For all peer groups, standards will be established for each of the six performance indicators by using a standard deviation. Systems that are within one standard deviation

of the arithmetic mean shall be judged as in compliance with the standard for the measure. Systems that meet the standards for 4 of the 6 performance measures shall be deemed in compliance with the cost-efficiency standards.

#### STEP 2

For those systems not in compliance with the cost efficiency standard after completion of Step 1, prepare tables showing a time-trend analysis of each of the six performance measures over the most recent five-year period. Systems showing improvement in measures in which they did not meet the standards in Step 1 will be deemed in compliance with the cost efficiency standards if when added to the number of measures they were in compliance with in Step 1 the total is 4 or more.

## STEP 3

For those systems still not in compliance after completion of Steps 1 and 2, assess the implementation status of recommendations made in the system's most recently completed management performance audit. A system which has made significant progress in implementing the majority of recommendations targeted at improving efficiency shall be deemed in compliance with the cost efficiency standards. At this time, WISDOT shall notify all transit systems of their status relative to compliance with the cost efficiency standards.

## STEP 4

If any transit systems remain out of compliance after completion of Steps 1 through 3, one of the following actions will be taken:

- A. If management performance audit recommendations have not been implemented, WISDOT shall provide technical assistance to aid in the implementation of the recommendations. If consultant services are necessary, the transit system shall pay the nonfederal share of the costs.
- B. If a management performance audit has not been conducted within the last three years, WISDOT shall schedule an audit as soon as possible.

## **PENALTY**

Systems deemed out of compliance with the cost efficiency standards as outlined above will be given a three year period of time in which to comply before being assessed a revenue penalty. After three years of non-compliance, a 10% revenue penalty shall be imposed, which will limit state aids to 90% of the state aid the system would have been entitled to if it were in compliance. The penalty remains in effect until the system comes into compliance.

# SUMMARY RESULTS STEP ONE ANALYSIS

The following eight transit systems failed to meet the performance standards in two or more performance measures. The compliance, at this stage, is defined as meeting the standard for three of the six cost efficiency measures.

	Efficiency		Effectiveness			
Expense/Revenue	Operating	Cost/Passenger	Passengers/Revenue	Passengers/Capita	Revenue	
Hour	Ratio		Hour		Hours/Capita	
		Sn	iall Buses			
			Bay Area Rural	Bay Area Rural	Bay Area	
					Rural	
		Share	d Ride Taxis			
	Clintonville	Clintonville	Clintonville			
		Edgerton	Edgerton	Edgerton		
	Grant Co.			Grant Co.	Grant Co.	
	New	New	New Richmond			
	Richmond	Richmond				
	Ozaukee	Ozaukee Co.	Ozaukee Co.	Ozaukee Co.		
	Co.					
		Plover	Plover	Plover		
	Washington	Washington	Washington Co.	Washington Co.	Washington	
	Co.	Co.			Co.	

# **Summary Results for Step Two Analysis**

Performance Over Past 5 Years (1997-2001)/Five Year Trend Analysis

	Expense/Revenue	Operating	Cost/Passenger	Passengers/Revenue	Passengers/Capita	Revenue	Number of	Number of	Final	System
	Hour	Ratio		Hour		Hours/Capita	areas out	areas out of	number of	pass/fail
							of	compliance	areas out	
							compliance	that show	of	
								improvement	compliance	
Bay Area	In Compliance	In	In Compliance	No Improvement	Improvement	No	3	1	2	Pass
Rural		Compliance				Improvement				
Clintonville	In Compliance	No	No	No Improvement	In Compliance	In	3	0	3	Fail
		Improvement	Improvement			Compliance				
Edgerton	In Compliance	In	No	Improvement	No Improvement	In	3	1	2	Pass
_	_	Compliance	Improvement			Compliance				
Grant Co.	In Compliance	Improvement	In Compliance	In Compliance	Improvement	No	3	2	1	Pass
						Improvement				
New	In Compliance	Improvement	No	Improvement	In Compliance	In	3	2	1	Pass
Richmond			Improvement			Compliance				
Ozaukee	In Compliance	Improvement	Improvement	Improvement	Improvement	In	4	4	0	Pass
Co.						Compliance				
Plover	In Compliance	In	Improvement	Improvement	Improvement	In	3	3	0	Pass
		Compliance				Compliance				
Washington	In Compliance	Improvement	Improvement	Improvement	Improvement	Improvement	5	5	0	Pass
Co.										

Shading indicates areas where system was out of compliance after Step 1 analysis.

# MEDIUM BUS EXTERNAL PEER GROUP SUMMARY

Performance Measure	Data	Mean	<b>Standard Deviation</b>
Cost/Hour	2001	\$57.44	\$10.21
Operating Ratio	2001	21.13%	15.01%
Cost/Passenger	2001	\$3.09	\$0.93
Passenger/Hour	2001	20.08	6.27
Passenger/Capita	2001	13.77	8.92
Hours/Capita	2001	0.66	0.25

# Performance Parameters +/- One Standard Deviation

\$47.23	\$67.65
6.12%	36.13%
\$2.16	\$4.02
13.82	26.35
4.85	22.69
0.41	0.90

\*Shading denotes system outside of the St. Dev.

	Е	xpense/	Operating		Cost/	Passengers/	Passengers/	Revenue Hours/
Medium Bus	Rev	enue Hour	Ratio		Passenger	Revenue Hour	Capita	Capita
Apple-Valley Transit	\$	59.88	13.02%	\$	3.80	15.77	6.46	0.41
Beloit-BTS	\$	70.35	17.87%	\$	4.79	14.69	7.34	0.50
Eau Claire-ECTS	\$	50.23	24.65%	\$	2.27	22.13	14.83	0.67
Green Bay-GBT	\$	57.66	16.60%	\$	2.85	20.26	10.03	0.50
Janesville-JTS	\$	63.96	18.90%	\$	3.86	16.56	9.19	0.56
Kenosha-KT	\$	55.98	11.71%	\$	2.19	25.58	20.64	0.81
LaCrosse Municipal Transit	\$	50.69	10.48%	\$	2.97	17.07	12.32	0.72
Oshkosh-OTS	\$	51.66	13.05%	\$	2.49	20.78	14.97	0.72
Racine-Belle Urban System	\$	52.50	22.32%	\$	2.70	19.44	16.08	0.83
Sheboygan-STS	\$	52.43	19.34%	\$	4.51	11.62	11.71	1.01
Waukesha - WTC	\$	45.73	17.20%	\$	3.66	12.50	12.11	0.97
Wausau - WATS	\$	58.47	15.02%	\$	2.76	21.22	14.05	0.66
Greely-The Bus	\$	48.48	17.45%	\$	3.23	15.00	5.88	0.39
Dubuque - City of	n/a		11.26%	n/a		n/a	n/a	n/a
Iowa City Transit	\$	60.70	22.86%	\$	2.08	29.22	18.42	0.63
Boise Urban Stages	\$	61.37	16.76%	\$	3.97	15.47	6.59	0.43
Decatur-DPTS	\$	66.84	9.47%	\$	3.28	20.40	8.59	0.42
Bloomington-BPT	\$	40.97	27.64%	\$	1.53	26.83	27.03	1.01
Evansville-METS	\$	46.17	23.64%	\$	3.04	15.21	7.16	0.47
Muncie-MITS	\$	60.99	8.37%	\$	2.95	20.71	14.89	0.72
Battle Creek-BCT	\$	66.51	18.73%	\$	3.51	18.97	7.29	0.38
Bay City-BMTA	\$	61.47	16.72%	\$	5.99	10.27	6.93	0.67
Jackson-JTA	\$	53.98	87.03%	\$	2.40	22.45	7.50	0.33
Kalamazoo-KMTS	\$	60.22	14.15%	\$	2.90	20.75	14.15	0.68
Muskegon Area Transit	\$	52.30	16.62%	\$	3.77	13.86	4.29	0.31
St. Cloud - SCMT	\$	51.61	26.37%	\$	2.24	23.01	19.68	0.86
Springfield-SU	\$	61.94	12.57%	\$	3.16	19.60	8.47	0.43
Missoula-MUT	\$	49.33	18.66%		2.78	17.72	12.24	0.69
Broome County	\$	53.71	32.80%		1.41	38.17	23.71	0.62
Utica-UTA	\$	42.18	31.65%		2.98	14.15	6.99	0.49
Salem-SAMTD	\$	82.90	15.13%		2.96	27.98	28.15	1.01
Erie-EMTA	\$	58.97	58.02%	\$	2.80	21.04	13.84	0.66
Bellingham-WTA	\$	87.90	11.14%	\$	2.57	34.22	49.17	1.44
GROUP MEAN AVERAGE:		\$57.44	21.13%		\$3.09	20.08	13.77	0.66

#### **SMALL BUS SUMMARY**

#### **Standard Deviation Performance Measure** Data Mean Cost/Hour 2001 \$43.87 \$8.04 Operating Ratio Cost/Passenger 4.30% 2001 11.35% 2001 \$9.96 \$3.83 Passenger/Hour Passenger/Capita Hours/Capita 2001 6.22 2.77 2001 4.78 2.24 2001 0.80 0.42

# Performance Parameters

+/- One Standard Deviation

\$35.83	\$51.91
7.05%	15.64%
\$6.12	\$13.79
3.45	9.00
2.54	7.02
0.38	1.22

<sup>\*</sup>Shading denotes system outside of the St. Dev.

	Expense/	Operating	Cost/	Passengers/	Passengers/	Revenue Hours/
Small Bus	Revenue Hour	Ratio	Passenger	Revenue Hour	Capita	Capita
Bay Area Rural	\$43.15	8.59%	11.64	3.19	1.05	0.33
Fond du Lac	\$37.97	11.84%	8.45	5.78	5.50	0.95
Ladysmith	\$36.06	11.90%	8.41	4.51	7.85	1.74
Manitowoc	\$59.11	8.49%	11.78	11.40	6.17	0.54
Merrill	\$50.37	20.12%	4.97	8.94	6.49	0.73
Monona	\$36.53	13.11%	7.63	3.51	2.38	0.68
Rice Lake	\$40.18	5.63%	17.75	6.35	4.80	0.76
Stevens Point	\$47.63	11.09%	9.02	6.08	3.98	0.65
GROUP MEAN AVERAGE:	\$ 43.87	11.35%	\$9.96	6.22	4.78	0.80

#### **SHARED RIDE TAXI SUMMARY**

#### **Performance Measure** Data Mean **Standard Deviation** Cost/Hour 2001 \$21.31 Operating Ratio 2001 29.00% 9.08% Cost/Passenger Passenger/Hour 2001 \$7.65 \$3.26 2001 3.12 0.97 Passenger/Capita Hours/Capita 2001 4.07 2.75 2001 1.27 0.76

#### **Performance Parameters**

+/- One Standard Deviation

\$17.13	
19.91%	38.08%
\$4.39	\$10.90
2.15	4.09
1.32	6.82
0.50	2.03

\*Shading denotes system outside of the St. Dev.

	Expense/	Operating	Cost/	Passengers/	Passengers/	Revenue Hours/
Shared-Ride Taxi	Revenue Hour	Ratio	Passenger	Revenue Hour	Capita	Capita
Baraboo	\$22.47	46.93%	6.96	3.23	3.97	1.23
Beaver Dam	\$17.22	35.05%	5.07	3.40	7.65	2.25
Berlin	\$21.14	26.83%	5.64	3.75	5.52	1.47
Black River Falls	\$27.12	33.45%	7.10	3.82	8.99	2.35
Chippewa Falls	\$18.72	35.21%	4.63	4.05	4.49	1.11
Clintonville	\$21.62	16.71%	11.63	1.86	1.91	1.03
Edgerton	\$19.00	21.52%	13.41	1.42	0.88	0.62
Fort Atkinson	\$19.49	31.03%	5.74	3.39	4.30	1.27
Grant Co.	\$20.96	19.02%	5.62	3.73	0.79	0.21
Hartford	\$26.99	27.30%	6.18	4.37	1.91	0.44
Jefferson	\$19.39	28.36%	6.27	3.09	2.79	0.90
Lake Mills	\$19.33	20.07%	8.58	2.25	1.79	0.79
Marinette	\$26.47	24.01%	7.67	3.45	2.91	0.84
Marshfield	\$18.29	37.07%	4.80	3.81	4.77	1.25
Mauston	\$21.03	40.80%	6.12	3.44	7.30	2.13
Medford	\$31.38	20.58%	8.48	3.70	2.53	0.68
Monroe	\$21.40	35.63%	4.65	4.60	5.22	1.14
Neillsville	\$17.87	18.36%	8.54	2.09	4.59	2.19
New Richmond	\$22.73	17.00%	14.02	1.62	1.16	0.71
Onalaska	\$21.10	24.63%	9.99	2.11	1.16	0.55
Ozaukee Co.	\$23.36	12.73%	18.32	1.27	0.62	0.49
Platteville	\$12.59	32.62%	6.12	2.06	1.97	0.96
Plover	\$18.92	23.93%	11.74	1.61	1.02	0.64
Port Washington	\$24.12	25.17%	6.29	3.83	2.22	0.58
Portage	\$23.28	41.95%	6.19	3.76	12.75	3.39
Prairie Du Chien	\$19.20	30.38%	6.44	2.98	4.33	1.45
Prairie Du Sac	\$36.28	11.80%	11.86	3.06	8.78	2.87
Reedsburg	\$22.86	35.39%	5.01	4.56	5.91	1.30
Rhinelander	\$15.95	45.25%	7.56	2.11	6.58	3.12
Ripon	\$24.08	23.11%	7.65	3.15	4.52	1.43
River Falls	\$22.80	22.38%	7.96	2.86	1.85	0.65
Shawano	\$15.95	47.43%	4.24	3.76	4.27	1.13
Stoughton	\$23.82	34.19%	5.49	4.34	3.09	0.71
Sun Prairie	\$21.76	31.48%	6.09	3.57	2.81	0.79
Viroqua	\$17.12	36.75%	4.02	4.26	8.30	1.95
Washington County	\$18.62	17.18%	14.99	1.24	0.44	0.36
Watertown	\$19.28	35.73%	4.40	4.39	6.20	1.41
Waupaca	\$20.09	36.93%	5.63	3.57	6.55	1.83
Waupun	n/a	n/a	n/a	n/a	n/a	n/a
West Bend	\$19.43	25.79%	5.30	3.66	4.77	1.30
Whitewater	\$19.26	27.78%	7.29	2.64	1.46	0.55
Wis Rapids	\$21.15	31.33%	9.93	2.13	3.85	1.81
GROUP MEAN AVERAGE:	\$21.31	29.00%	\$7.65	3.12	4.07	1.27

#### MILWAUKEE CO EXTERNAL PEER GROUP SUMMARY

#### **Performance Measure** Data Mean **Standard Deviation** Cost/Hour 2001 \$88.46 \$15.64 Operating Ratio 2001 24.45% 6.73% Cost/Passenger Passenger/Hour 2001 \$2.99 \$0.62 2001 30.36 6.38 Passenger/Capita Hours/Capita 2001 25.49 14.05 2001 0.82 0.38

#### **Performance Parameters**

+/- One Standard Deviation

\$72.82	\$104.10
17.72%	31.19%
\$2.37	\$3.61
23.98	36.75
11.45	39.54
0.45	1.20

\*Shading denotes system. outside of the St. Dev.

	Expense/	Operating	Cost/	Passengers/	Passengers/	Revenue Hours/
MCTS Peer Group	Revenue Hour	Ratio	Passenger	Revenue Hour	Capita	Capita
Milwaukee-County	\$74.66	34.81%	1.63	45.81	57.19	1.25
Oakland-ACCTD	\$101.01	24.87%	2.79	36.26	19.51	0.54
Denver-RTD	\$83.31	21.83%	2.93	28.48	46.42	1.63
Indianapolis-IPT	\$64.37	23.69%	2.71	23.75	11.38	0.48
Louisville-TARC	\$67.52	15.28%	2.50	26.97	21.41	0.79
Detroit-D-DOT	\$112.01	14.60%	4.11	27.23	11.15	0.41
Minneapolis-St. Paul-MT	\$100.78	36.10%	2.53	39.87	35.27	0.88
Kansas City-KCATA	\$85.13	16.76%	3.27	26.01	11.87	0.46
St. Louis-Bi-State	\$91.31	29.11%	3.15	28.98	18.60	0.64
Cincinnati-SORTA	\$72.09	30.76%	2.54	28.38	20.46	0.72
Cleveland-RTA	\$93.05	25.39%	3.62	25.72	28.08	1.09
Columbus-COTA	\$89.15	20.66%	3.66	24.36	19.45	0.80
Pittsburgh-PAA	\$87.83	27.53%	3.01	29.21	39.33	1.35
Providence-RIPTA	\$116.23	20.96%	3.41	34.08	16.80	0.49
GROUP MEAN AVERAGE:	\$88.46	24.45%	\$2.99	30.36	25.49	0.82

# MADISON METRO EXTERNAL PEER GROUP SUMMARY

Performance Measure	Data	Mean	Standard Deviation
Cost/Hour	2001	\$73.95	\$14.09
Operating Ratio	2001	29.54%	9.95%
Cost/Passenger	2001	\$2.85	\$0.65
Passenger/Hour	2001	27.24	7.53
Passenger/Capita	2001	20.82	10.50
Hours/Capita	2001	0.77	0.36

# Performance Parameters +/- One Standard Deviation

\$59.85	\$88.04
19.59%	39.49%
\$2.20	\$3.51
19.71	34.76
10.32	31.32
0.41	1.12

<sup>\*</sup>Shading denotes system outside of the St. Dev.

	Expense/	Operating	Cost/	Passengers/	Passengers/	Revenue Hours/
Madison Metro Peer Group	Revenue Hour	Ratio	Passenger	Revenue Hour	Capita	Capita
Madison-MMT	\$76.71	23.65%	2.80	27.35	41.79	1.53
Hartford-CT Transit	\$71.09	32.78%	2.06	34.58	30.84	0.89
Des Moines-Metro	\$62.67	45.50%	2.49	25.13	12.63	0.50
Indianapolis-IPT	\$64.37	23.69%	2.71	23.75	11.38	0.48
Lansing-CATA	\$82.13	13.91%	2.21	37.19	29.76	0.80
Omaha-OTA	\$52.59	29.14%	3.80	13.85	6.93	0.50
Albany-CDTA	\$66.94	27.57%	3.06	21.89	22.83	1.04
Rochester-RGRTA	\$75.97	45.36%	2.91	26.11	19.61	0.75
Syracuse-CNY Centro	\$77.86	33.15%	2.37	32.86	7.00	0.21
Dayton-MVRTA	\$75.22	16.96%	2.98	25.20	23.57	0.94
Harrisburg-CAT	\$65.55	33.38%	4.07	16.09	6.45	0.40
Providence-RIPTA	\$116.23	20.96%	3.41	34.08	16.80	0.49
Richmond-GRT	\$66.24	36.19%	1.61	41.18	25.66	0.62
Spokane-STA	\$76.10	19.33%	3.06	24.88	30.00	1.21
Tacoma-Pierce Transit	\$79.53	41.58%	3.26	24.40	27.12	1.11
GROUP MEAN AVERAGE:	\$73.95	29.54%	\$2.85	27.24	20.82	0.77

# COMMUTER BUS EXTERNAL PEER GROUP SUMMARY

#### **Performance Measure** Standard Deviation Data Mean \$23.26 4.61% Cost/Hour 2001 \$86.70 Operating Ratio Cost/Passenger Passenger/Hour 2001 18.18% 2001 \$10.08 \$4.16 2001 86.70 23.26 0.50 Passenger/Capita 2001 1.01 Hours/Capita 2001 0.76 0.66

#### **Performance Parameters**

+/- One Standard Deviation

\$63.44	\$109.95
13.58%	22.79%
\$5.92	\$14.24
63.44	109.95
0.51	1.51
0.10	1.42

\*Shading denotes system outside of the St. Dev.

	Expense/	Operating	Cost/	Passengers/	Passengers/	Revenue Hours/
Commuter Bus	Revenue Hour	Ratio	Passenger	Revenue Hour	Capita	Capita
Ozaukee Co.	\$101.35	14.86%	\$9.79	101.35	1.11	0.11
Racine Com.	\$105.17	18.81%	\$15.89	105.17	0.47	0.47
Washington Co.	\$54.04	14.60%	\$8.54	54.04	0.79	0.79
Waukesha Co.	\$86.23	24.46%	\$6.11	86.23	1.65	1.65
GROUP MEAN AVERAGE:	\$86.70	18.18%	\$10.08	86.70	1.01	0.76